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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,336	06/22/2001	Robert E. Dvorak	BLFR 1004-1	7227
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HAYNES BEFFEL & WOLFELD LLP			VAN DOREN, BETH	
P O BOX 366			ART UNIT	
HALF MOON BAY, CA 94019			PAPER NUMBER	

3623

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/888,336

Applicant(s)

DVORAK ET AL.

Examiner

Beth Van Doren

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 and 53-70 is/are pending in the application.
- 4a) Of the above claim(s) 1-35 and 64-70 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-51 and 53-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The following is a non-final office action in response to communications received 01/17/2006. In this response, Applicant has elected claims 36-63 (Group II) with traverse. Therefore, claims 1-35 and 64-70 have been withdrawn. Claim 52 has been canceled. Therefore, claims 36-51 and 53-63 are pending in the current office action.

#### ***Election/Restrictions***

2. Applicant's election with traverse of claims 36-63 (Group II) in the reply filed on 01/17/2006 is acknowledged. The traversal is on the grounds that there is no two-way distinctness and there is no serious burden of searching. This is not found persuasive because:

Examiner would first like to point out that on pages 8-9 of the response, Applicant has cited the criteria for restriction between a combination and a subcombination. Examiner points out that the restriction requirement of 09/16/2005 was actually a restriction between subcombinations usable together. Therefore, MPEP § 806.05(d) sets forth the criteria required in the instant restriction.

Therefore, since it can be shown that the two inventions are separately usable and are not obvious variants, the restriction based on subcombinations usable together is proper. Claims 1-35 and 67-70 (Group I) have separate utility such as projecting open to buy inventory values by calculating open to buy values from the inventory budgets and the aggregated projected future inventory and reporting this open to buy value (i.e. no prorating of budgets and no calculated lost sales). Claims 36-63 (Group II) are separately usable, such as prorating inventory budgets among items and reporting a comparison of the prorated budgets and projected future inventory (i.e. no calculation using inventory budgets and the aggregated projected inventory and no

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calculated lost sales). Finally, claims 64-66 have separate utility, such as calculating lost sales for a group of items due to inadequacies in the projected future inventory (i.e. no prorating budgets and no calculation using inventory budgets and the aggregated projected inventory). These three concepts contain different implications in the prior art, which causes them to be non-obvious variants and separately usable. See MPEP § 806.05(d). The applicant has not provided arguments with facts that show the other use, suggested by the examiner, cannot be accomplished or is not reasonable.

Based on the differing subject matter, the search required for Group I is not required for Groups II or III, the search required for Group II is not required for Groups I or III, and the search required for Group III is not required for Groups I or II, and therefore restriction for examination purposes as indicated is proper.

As to Applicant's comment regarding the same subject matter being searched in Applicant's five applications before the Examiner, Examiner reminds the Applicant that each of these applications is examined singularly on its own merits. Examiner further reminds the applicant that two or more independent and distinct inventions may not be claimed in the same application and that restriction is used to require an applicant to elect a single claimed invention in an Application. Though usually made before the first action on the merits, as is the case in this application, restriction is proper at any time before final action. Refer to MPEP § 802, § 802.02, and § 803.

The requirement is still deemed proper and is therefore made FINAL.

### ***Specification***

3. Applicant is reminded of the proper content of an abstract of the disclosure.

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A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it is too general in nature and does not portray what is new in the art to which the invention pertains. Further, it contains the language "aspects of the present invention are reflected in the detailed description, accompanying figures, and claims accompanying the abstract". Therefore, the abstract (1) does not describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details and (2) contains implied phrases. Correction is required. See MPEP § 608.01(b).

5. The title of the invention is objected to because is not descriptive. First, it contains an acronym, which is not made sufficiently clear in the title. Further, the title is not indicative of the invention to which the claims are directed. Therefore, a new title is required. Examiner suggests --A method for prorating inventory budgets among items--.

***Drawings***

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Currently the drawings (figures 1-5) appear to be mere printouts of open to buy reports in spreadsheet format. There are no drawings that include how this numbers are arrived out or how they match to the language of the claims. Therefore, the features of setting inventory budgets for groups of items, projecting future sales for the items, setting notional deliveries for the items, reporting open to buy values that compare the prorated inventory budgets must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

7. Claim 42 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 38. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).
8. Claims 56-57 are objected to because of the following informalities: omitted words. Claim 56 recites "wherein notional delivery levels determined with reference to a causal calendar" and claim 57 recites "wherein notional delivery levels determined with reference to a causal calendar". The limitation --wherein notional delivery levels are determined with reference to a causal calendar-- is more appropriate in both instances. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
10. Claims 36-51 and 53-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landvater (U.S. 6,609,101) in view of Dulaney et al. (U.S. 6,341,269).

As per claim 36, Landvater teaches a method of prorating inventory budgets among items, including:

setting inventory budgets for groups of items (See column 20, lines 29-47, which discusses budgets for inventory and replenishment shipments);

projecting future demand for the items (See column 4, lines 25-37, column 5, lines 1-15, column 8, lines 14-25, wherein future sales/need for items are performed);

setting notional deliveries for the items, utilizing the projected future demand unconstrained by the inventory budgets (i.e. estimated) (See column 8, lines 25-45, column 15, line 30-column 14, lines 20, wherein planned replenishment shipments are set using the projected future sales as input into the replenishment system);

simulating future inventory for the items, utilizing current inventory, the projected future demand, firm future deliveries and the notional deliveries (See column 5, lines 10-30, column 8, lines 15-40, column 14, lines 3-30, wherein future inventory is projected using current inventory, projected future sales, planned deliveries and deliveries that are set to occur);

prorating the inventory budgets among the items, for a plurality of predetermined time periods (See column 20, lines 29-47, wherein the financials of future shipments/inventory is considered, divided proportionally amongst the products); and

calculating open to buy values that compare the prorated inventory budgets for the items or aggregations of the items to the simulated future inventory for the items or aggregations of the items (See column 20, lines 29-47, wherein the budgets are compared to the future inventory to determine projected inventory investment, useful for cash planning).

However, Landvater does not expressly disclose reporting these values.

Dulaney et al. discloses reporting values associated with financials of the system (See figures 1A, 1B, and 5, column 4, lines 1-5 and 40-50, column 15, lines 35-55).



Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to output the budget related values to a user in order to increase the use of the data in cash planning for the company. See column 20, lines 35-48, of Landvater.

As per claim 37, Landvater teaches calculating corrected deliveries for increased sales due to increased demand for a time period at respective selling locations associated with the items (See column 4, lines 17-30, column 5, lines 1-15 and 35-47, column 11, lines 10-25, column 18, lines 1-5, wherein sales forecasts are corrected for holidays, promotions, and other events where sales are determined to be increased. The user is allowed to override a sales forecast). Landvater also discloses corrected deliveries for lower sales frequency items (See column 10, lines 30-45 and 55-67, column 11, lines 30-50). These delivery plans are calculated and consistent with prorated open to buy inventory budgets (See column 20, lines 29-47, wherein the budgets are compared to the future inventory to determine projected inventory investment, useful for cash planning).

However, Landvater does not expressly disclose calculating lost sales for the items based on the reduced notional deliveries.

Dulaney et al. discloses calculating lost sales for the items based on the reduced deliveries (See abstract, column 5, lines 43-57, and column 6, lines 50-65).

Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. Landvater specifically discloses adjusting planned deliveries for high sales items and

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periods (such as promotions, holidays, display changes, etc.) as well as reducing planned deliveries for low sales items (such as hot sauce and other not frequently purchased items).

Landvater specifically forecasts to increase deliveries during holidays, promotions, etc. to ensure that enough products are in stock. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include stockout considerations (i.e. when enough products are not in stock) in order to increase the accuracy of the financial planning system of Landvater by ensuring that all data important to budgeting are considered, thus making the data for cash planning useful. See column 20, lines 35-48 of Landvater, and column 5, lines 43-57, and column 6, lines 50-65 of Dulaney et al.

As per claims 38, 39, and 42, Landvater wherein the notional delivery levels are constrained by lead time for ordering and obtaining delivery of the items (See column 8, lines 25-40, and column 17, line 58-column 18, line 3, wherein lead time is a consideration in replenishment).

As per claim 40, Landvater discloses wherein the projected future demand for the items are projected on a daily or more frequent basis (See column 10, lines 20-30, wherein the future demand is stored on a daily basis).

As per claim 41, Landvater discloses wherein the simulated future sales for the items are simulated on a daily or more frequent basis (See column 10, lines 20-30, wherein the future demand is stored on a daily basis).

As per claims 43 and 44, Landvater wherein the notional delivery levels are based in part on optimal stocking levels (See column 4, lines 25-40, column 8, lines 20-40, column 14, lines 1-

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30, wherein optimal numbers, such as safety stock, days of supply, etc., are considered in the delivery plan).

As per claims 45 and 46, Landvater discloses reporting the simulated future inventory levels that exceed the optimal stocking levels (See column 11, lines 25-50, wherein the user is told that the forecast for the product exceeds a forecast threshold).

As per claims 47-50, Landvater discloses reporting the simulated future inventory levels that exceed the optimal stocking levels (See column 11, lines 25-50, wherein the user is told that the forecast for the product exceeds a forecast threshold). Landvater further discloses placing purchase orders with suppliers that have been set for a date, but have not yet been fulfilled (See column 13, lines 30-50 and 60-67, column 14, lines 1-22, wherein a date is set for a shipment, but it has not yet reached the purchaser). Further, Landvater discloses wherein the notional delivery levels are consistent with minimum order quantities for the items (See column 8, lines 22-40, column 15, lines 25-40, column 16, lines 13-36, wherein group products and typical shipping quantities are considered).

However, neither Landvater nor Dulaney et al. expressly disclose reporting values of these purchase orders or reporting values that exceed minimum order quantities.

Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to report values associated with purchase orders, such as the number of items ordered, in order to more accurately forecast for replenishment by including the values already ordered in

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the on-hand inventory. See column 5, lines 17-30, and column 14, lines 3-20, of Landvater that discusses this process.

As per claim 51, Landvater teaches wherein the projected future demand levels are based in part on desired in stock levels (See column 14, lines 3-33 and line 65-column 15, line 6, wherein safety stock is considered).

As per claim 53, Landvater discloses wherein the sales levels are corrected for increased sales due to increased demand for a time period at respective selling locations associated with the items (See column 4, lines 17-30, column 5, lines 1-15 and 35-47, column 11, lines 10-25, column 18, lines 1-5, wherein sales forecasts are corrected for holidays, promotions, and other events where sales are determined to be increased. The user is allowed to override a sales forecast). However, Landvater does not expressly disclose stockouts.

Dulaney et al. discloses calculating lost sales for the items based on the reduced deliveries (See abstract, column 5, lines 43-57, and column 6, lines 50-65).

Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. Landvater specifically discloses adjusting planned deliveries for high sales items and periods (such as promotions, holidays, display changes, etc.) as well as reducing planned deliveries for low sales items (such as hot sauce and other not frequently purchased items). Landvater specifically forecasts to increase deliveries during holidays, promotions, etc. to ensure that enough products are in stock. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include stockout considerations (i.e. when enough products are not in stock) in order to increase the accuracy of the financial planning system of

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Landvater by ensuring that all data important to budgeting are considered, thus making the data for cash planning useful. See column 20, lines 35-48 of Landvater, and column 5, lines 43-57, and column 6, lines 50-65 of Dulaney et al.

As per claims 54 and 55, Landvater discloses wherein the notional delivery levels are consistent with presentation quantities for the items at respective selling locations associated with the items (See column 14, lines 3-33 and line 65-column 15, line 6 and lines 15-25, wherein safety stock and delivery quantities are in line with presentations (shelf displays) at stores).

As per claim 56 and 57, Landvater discloses wherein the notional delivery levels determined with reference to a causal calendar of events (See column 13, line 30-40, line 60-column 14, line 26, and column 17, lines 5-20, 30-40, and 57-67, wherein deliveries are based on a calendar of events, such as promotional dates and display changes, which are known in the system).

As per claim 58 and 59, Landvater discloses wherein the notional delivery levels take into account planned promotions (See column 5, lines 30-50, and column 17, lines 5-20, 30-45, and 58-67, and column 18, lines 1-25, wherein promotions are considered).

As per claim 60 and 61, Landvater discloses wherein the notional delivery levels are consistent with minimum order quantities for the items (See column 8, lines 22-40, column 15, lines 25-40, column 16, lines 13-36, wherein group products and typical shipping quantities are considered).

As per claim 62, Landvater teaches wherein the prorating is based on the simulated future sales (See column 20, lines 29-47, wherein the financials of future shipments/inventory is considered, divided proportionally amongst the products, based on the forecasts of the system).

As per claim 63, Landvater discloses wherein the simulated future sales levels are corrected for increased sales due to increased demand for a time period at respective selling locations associated with the items (See column 4, lines 17-30, column 5, lines 1-15 and 35-47, column 11, lines 10-25, column 18, lines 1-5, wherein sales forecasts are corrected for holidays, promotions, and other events where sales are determined to be increased. The user is allowed to override a sales forecast). However, Landvater does not expressly disclose stockouts.

Dulaney et al. discloses simulating lost sales for the items based on the reduced deliveries and the costs associated with these lost sales (See abstract, column 5, lines 43-57, and column 6, lines 50-65).

Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. Landvater specifically discloses adjusting planned deliveries for high sales items and periods (such as promotions, holidays, display changes, etc.) as well as reducing planned deliveries for low sales items (such as hot sauce and other not frequently purchased items). Landvater specifically forecasts to increase deliveries during holidays, promotions, etc. to ensure that enough products are in stock. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include stockout considerations (i.e. when enough products are not in stock) in order to increase the accuracy of the financial planning system of Landvater by ensuring that all data important to budgeting are considered, thus making the data for cash planning useful. See column 20, lines 35-48 of Landvater, and column 5, lines 43-57, and column 6, lines 50-65 of Dulaney et al.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Huang et al. (U.S. 5,953,707) discloses a decision support system for managing a supply chain.

Lee et al. (U.S. 5,712,985) discloses determining product demand based on events like promotions, etc.

Kellond et al. (U.S. 2003/0061081) discloses a dynamic supply chain model that considers inventory costs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (571) 272-6737. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lwd  
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April 3, 2006

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